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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/622,240	11/13/2000	Risto Aalto	875.0001USU	9698

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EXAMINER

PAN, YUWEN

ART UNIT	PAPER NUMBER
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2682

DATE MAILED: 06/09/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/622,240

Applicant(s)

AALTO ET AL.

Examiner

Yuwen Pan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date 13.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Response to Argument

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
2. Applicant's arguments, see paper 12, filed 5/17/04, with respect to the rejection(s) of claim(s) 1 under 35 USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Bruckert et al (US005956641A).

DETAILED ACTION

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-10 rejected under 35 U.S.C. 103(a) as being unpatentable over Wallentin et al (US006230013B1) in view of Bruckert et al (US005956641A) and Rahman (US006078817A).

With respect to claim 1,7-9, Wallentin discloses a cellular system comprising: terminal (see figure 1A and item MS), base station (see figure 1A and item 26), and radio network controllers (see figure 1A and item 22), a radio network controller provides a base station with transmission power controlling information (see figure 1A and item 28), a macro diversity connection is established where a given branch goes between the serving radio network control

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and the terminal through the drift radio network controller and the drift base station (see column 3 and lines 33-48).

Wallentin et al doesn't disclose a method of controlling the transmission power in a cellular radio system comprising: call control, load control, wherein a radio network controller monitors and balances the use of radio resources in the base stations that operate under it, and transmitting information limiting the transmission power in said macrodiversity connection branch from the drift radio network controller to the serving radio network controller, transmitting information controlling the transmission power of said macro diversity connection branch from the serving radio network controller the drift radio network controller.

Rahman discloses a radio network controller monitors and balances the use of radio resources in the base stations that operate under it (see column 3 and lines 14-60).

It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching Rahman with Wallentin's method such that base station's limited radio resource would not be overloaded by macro diversity mode.

Bruckert discloses a method for controlling transmission powers during a soft handover in a CDMA mobile communication transmitting information limiting the transmission power in said macro diversity connection branch from the drift radio network controller to the serving radio network controller, transmitting the information controlling the transmission power of said macrodiversity connection branch from the serving radio network controller to the drift radio network controller, and transmitting information controlling the transmission power of said macrodiversity connection branch from the drift radio network controller to the drift base station (see figure 6 and column 7 and line 55- column 8 and line 40).

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It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching of Bruckert with Wallentin's method such that base stations' status of power output are combined/exchanged through radio network controllers and the receiving qualities of the respective radio channels become equal to a determined reference quality.

With respect to claim 2, Wallentin et al further discloses a special data transmission form line is established between two radio network controllers, is used whereupon the transformation into a data transmission form between a radio network controller and a base station takes place in the radio network controller (see figure 2 and column 5 and line 23-column 6 and line 38).

With respect to claim 3-5, 10, Bruckert further discloses in macro diversity connection branch both MS and BS would carry out the transmission power control at a prescribed transmission power interval (see column 8 and line 2-9).

With respect to claim 6, Wallentin discloses a cellular system comprising: terminal (see figure 1A and item MS), base station (see figure 1A and item 26), and radio network controllers (see figure 1A and item 22), a radio network controller provides a base station with transmission power controlling information (see figure 1A and item 28), a macro diversity connection is established where a given branch goes between the serving radio network control and the terminal through the drift radio network controller and the drift base station (see column 3 and lines 33-48).

Wallentin doesn't disclose:

Means for establishing information, according to outer-loop control, controlling the transmission power and for transmitting it to a base station;

Means for controlling the load by monitoring and balancing the use of radio resources in the base stations which operate under it, characterized in that to control the transmission power in a macro diversity connection, a given branch of which goes between a radio network controller and a terminal through a drift radio network controller and a drift base station, it comprises

Means for establishing information resulting from load control and limiting the transmission power in said macro diversity connection branch and for transmitting it from the drift radio network controller to the serving radio network controller,

Means for establishing information controlling the transmission power in said macro diversity connection branch and for transmitting it from the serving radio network controller to the drift radio network controller, and

Means for establishing information controlling the transmission power of the drift base station on the basis of the information received from the serving radio network controller and for transmitting it to the drift base station.

Rahman discloses a radio network controller monitors and balances the use of radio resources in the base stations that operate under it (see column 3 and lines 14-60).

It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching Rahman with Wallentin's method such that base station's limited radio resource would not be overloaded by macro diversity mode.

Bruckert discloses Means for controlling the load by monitoring and balancing the use of radio resources in the base stations which operate under it, characterized in that to control the transmission power in a macro diversity connection, a given branch of which goes between a

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radio network controller and a terminal through a drift radio network controller and a drift base station, it comprises

Means for establishing information resulting from load control and limiting the transmission power in said macro diversity connection branch and for transmitting it from the drift radio network controller to the serving radio network controller,

Means for establishing information controlling the transmission power in said macro diversity connection branch and for transmitting it from the serving radio network controller to the drift radio network controller, and

Means for establishing information controlling the transmission power of the drift base station on the basis of the information received from the serving radio network controller and for transmitting it to the drift base station (see figure 6 and column 7 and line 55- column 8 and line 40).

It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching of Bruckert with Wallentin's method such that base stations' status of power output are combined/exchanged through radio network controllers with the functions of combining station and the receiving qualities of the respective radio channels become equal to a determined reference quality.

Conclusion


5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lee et al (US005649000A) discloses method and system for providing a different frequency handoff in a CDMA cellular telephone system.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuwen Pan whose telephone number is 703-305-7372. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 703-308-6739. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Yuwen Pan
June 2, 2004


VIVIAN CHIN
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